

XXXIX.—On Two new Members of the Genus *Heteromys* and Two of *Neotoma*. By OLDFIELD THOMAS.

IN the April number of the 'Annals' \* I had the pleasure of describing two new pocket-mice of the genus *Heteromys* from Mexico and Guatemala, one of them, *H. Salvini*, representing a new annexant group distinguished by the characters presented by the soles of the hind feet. To this species, *H. Salvini*, besides the type from Dueñas, Guatemala, a second specimen from Costa Rica was doubtfully referred.

The Museum has now received from Dr. A. C. Buller, the discoverer of the Mexican species previously described, another pocket-mouse from a different locality in Jalisco, and this proves also to belong to the group of which *H. Salvini* is typical, and agrees closely with it in size and cranial characters, but differs considerably in colour.

On comparing this new specimen with the other two from Guatemala and Costa Rica, it is evident that it represents a new species of this group, while at the same time a more detailed examination shows that the Costa-Rican animal ought itself to be separated, at least subspecifically, from the Guatemalan.

*Heteromys pictus*, sp. n.

Size about as in *H. Salvini*. Colour above coarsely grizzled rufous, the usual black-tipped spines being profusely mixed both on head and body with coarse orange-tipped hairs; sides brighter rufous, the junction between the dorsal and ventral colours being marked, especially anteriorly, with a bright orange-rufous line, far richer than in any other species. Ears black with white edges. Fore limbs wholly white, except that there is an inconspicuous patch of grey outside the elbow. Hind limbs white on their inner sides and on the top of the feet, dusky on their outer and hinder sides, this colour passing down on to the hairy part of the soles of the feet. Soles hairy for about one third the total length of the foot; the naked part with six pads as in *H. Salvini*, but the minute fifth one is situated rather further forwards, half-way between the fourth and sixth. Tail sharply bicolor, blackish above, white beneath.

\* Ann. & Mag. Nat. Hist. (6) xi. p. 329 (1893).

Skull very similar to that of *H. Salvini (typicus)*, but rather smaller and more delicately built; interparietal large, its length 54 per cent. of its breadth; upper incisors forming a segment of a very small circle, so that their tips are much bent inwards towards the mouth, and the diastema is proportionally short.

Dimensions of the type (a beautifully prepared ♀ skin):—

Head and body 104 millim., tail 113, hind foot 24·8, ear from notch (contracted) 12.

Skull: basal length 26·5, greatest length 31·6, greatest breadth 15·2; nasals, length 12·7, breadth 3·6; interorbital breadth 7·7; interparietal, length 4·6, breadth 8·5; diastema 7·7; length of upper molar series 4·3.

*Hab.* Mineral San Sebastian, Jalisco, Mexico, 4300 feet. Coll. Dr. A. C. Buller, May 9, 1893.

*Heteromys Salvini nigrescens*, subsp. n.

Colour very similar to that of *H. S. typicus*, but the yellowish grizzling on the back, inconspicuous in that animal, is entirely absent, at least along the mesial line, so that the dorsal colour is a deep uniform smoky brown. Towards the sides a few yellow-tipped hairs are present, but not in sufficient numbers to affect the general tone. No trace of a yellowish lateral line. Limbs as in *H. S. typicus*.

Skull decidedly smaller and more delicate than in the typical form, the muzzle more slender, the interorbital region narrower, and the interparietal conspicuously smaller (its length-breadth percentage 51).

Dimensions of the typical skin (B.M. 69. 7. 19. 6):—

Head and body 127; tail broken; hind foot without claws 25.

Skull: greatest length 32·7, greatest breadth 15·4; nasals, length 12·7, breadth 3·8; interorbital breadth 6·8; interparietal, length 4·1, breadth 8; diastema 9·4; length of upper molar series 4·7.

*Hab.* Costa Rica.

*Neotoma macrotis*, sp. n.

Intermediate in size between the western *N. floridana* and *N. mexicana*. Colour, so far as can be made out in a spirit-specimen, very much as in the latter species. Belly-hairs white-tipped. Feet white, faintly clouded proximally with

grey. Tail sharply bicolor, black above, white below and on the sides; well covered with hairs, but the scales showing through. Ears very large, laid forward they reach in front of the anterior canthus of the eye; their minute hairs reddish brown.

Skull strongly built, its frontal profile convex; supra-orbital ridges strongly marked; anterior palatine foramina barely reaching backward to the level of the anterior root of  $m_1$ . Teeth small; their structure as usual.

Dimensions of the type (an old male in spirit):—

Head and body 180 millim., tail 165; hind foot, without claws, 33.7; ear from notch 29.

Skull: basal length 41.6, greatest breadth 24.7; nasal length 18.4; interorbital breadth 6; interparietal, length 5, breadth 11; palate, length 23.1; length of palatine foramina 9.8, upper molar series 8.4.

*Hab.* San Diego, California. Coll. Prof. Eigenmann.

#### *Neotoma lepida*, sp. n.

Size very small, smaller than in any known species. Colour soft ashy grey, washed with pale fawn, the general tone not unlike that of specimens of *N. arizonæ*; hairs of chest and inguinal region pure white, those of belly grey basally. Ears large, their minute hairs whitish. Hands and feet pure white. Tail very thickly haired, so much so as to be intermediate between that of the round-tailed and the bushy-tailed species, the scales entirely hidden by the hairs; its colour mixed brownish fawn above, white below.

Skull small and delicate; frontal profile flattened; supra-orbital edges square, scarcely ridged; palatine foramina as in *N. macrotis*; molars small.

Dimensions of the type (a skin, fully adult):—

Head and body (probably stretched) 180 millim., tail (c.) 100, hind foot 27.2, ear 25.

Skull: lambda to nasal tip 34.5; greatest breadth 21.2; nasal length 14.6; interorbital breadth 5.4; palate, length 20; palatine foramen 8.2; upper molar series 7.5.

*Hab.* Utah.

This interesting wood-rat had been put down as *N. cinerea*, but its far smaller size and less bushy tail will readily distinguish it from that species.